IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Inventorship.. Appiah et al.
Appellant.. Microsoft Corporation
Group Art Unit 2142
Examiner ....Willett/Rinehart
Confirmation No. 3503
Attorney's Docket No. MS1-435US
Title: Printer Driver Identification For A Remote Printer

APPEAL BRIEF

To: Commissioner for Patents
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Pursuant to 37 C.F.R. §41.37, Appellant hereby submits an appeal brief for

application 09/454,221, filed December 9th, 1999, within two months of the

requisite time from the date of filing the Notice of Appeal along with a two-month

extension. Accordingly, Appellant appeals to the Board of Patent Appeals and

Interferences seeking review of the Examiner's rejections.

Appeal Brief Items   Page

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(1)   Real Party in Interest

The real party in interest is Microsoft Corporation, the assignee of all right, title and interest in and to the subject invention.

(2)   Related Appeals and Interferences

Appellant is not aware of any other appeals, interferences, or judicial proceedings that will directly affect, be directly affected by, or otherwise have a bearing on the Board's decision to this pending appeal.

(3)   Status of Claims

Claims 1-40 stand rejected and are pending in this Application. The rejections of Claims 1-40 are appealed. Claims 3-14, 16-24, and 27-28 are original and hence bear the designator "(original)". Claims 1, 2, 15, 25-26, and 29-40 are previously presented and hence bear the designator "(previously presented)".

Claims 1-40 are set forth in the Appendix of Appealed Claims on page 22.

(4)   Status of Amendments

The Final Office Action, which is the subject of this Appeal, was mailed December 14th, 2004 (herein the "Final Office Action").

The Office mailed an Advisory Action on March 25th, 2005, after which Appellant filed a Notice of Appeal dated April 14th, 2005.

No amendments were made to the claims subsequent to the final rejection.

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(5)   Summary of Claimed Subject Matter

A concise explanation of each of the independent claims is included in this Summary section, including specific reference characters. These specific reference characters are examples of particular elements of the drawings for certain claimed embodiments. It is to be appreciated and understood that the claims are not to be limited to solely the elements corresponding to these reference characters and that this section is provided to comply with the requirement of 37 CFR § 41.37(c)(1)(v).

Claim 1 recites a method in a server-client environment ("server-client system" 50). The method comprises: receiving at the server (32 in Fig. 1 or 52 in Fig. 2) a driver identifier (included as part of printer driver information obtained at step 422) for a printer (88) that is attached to the client (34 Fig. 1 or 54 Fig. 2); using the driver identifier to select a closest matching driver (70) of a plurality of drivers ("driver match" 424) to install at the server (52); and installing, at the server (52) and not at the client (54), the selected driver (70) in order to enable applications executing on the server (52) to print to the printer (88) using the installed driver (70).

Claim 15 recites a method implemented in a server (32 or 52) in a server-client environment ("server-client system" 50). The method comprises: automatically selecting at least one of a plurality of drivers (driver library 68, pg. 7 line 14) corresponding to a peripheral device ("printer" 88) attached to the client (54) (step 214, pg. 10 lines 16-20); and installing, at the server (52) and not at the client (54), the selected at least one driver (step 214, pg. 10 lines 20-23) wherein the server (52) can interface with the peripheral device (88) using the driver (70)

to cause the selected at least one driver (70) to perform an action at the peripheral device (88) using the driver (70).

Claim 26 recites one or more computer-readable media having stored thereon a computer program that, when executed by one or more processors (56) of a server (52) in a client-server system (50), causes the one or more processors (56) to: receive a printer driver identifier for a printer attached to a client (step 422 pg. 11, lines 4-15), use the printer driver identifier to select one of a plurality of printer drivers to install at the server and not at the client (step 424) according to the following, if a particular printer driver of the plurality of printer drivers has a corresponding printer driver identifier that is the same as the received printer driver identifier, then selecting that particular driver (step 432), if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then selecting that particular printer driver (step 434), and if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver identifier, then selecting that particular printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier (step 436); and, install the selected printer driver at the server in order to enable the selected printer to print (step 428).

Claim 29 recites an apparatus comprising: a driver library (68) including a plurality of printer drivers (pg. 7 lines 14-15); and a driver matching module (69)

to select at least one of the plurality of printer drivers to be installed on the apparatus to enable a printer (88) attached to a client (54) connected with the apparatus to print, wherein the driver (70) is installed on the apparatus and not the client (54).

Claim 33 recites a system comprising: a client (54) computer having a local printer (88) attached thereto; and a server (52) computer coupled to the client (54) computer via a network (38), wherein the server (52) computer includes, a driver library (68) including a plurality of printer drivers (pg. 7 lines 14-15), and a driver matching module (69) to select at least one of the plurality of printer drivers (pg. 7 lines 14-15) for installation on the server (52) computer and not the client (54) computer to allow applications executing on the server (52) computer to print to the local printer (88), the driver matching module (69) selecting one of the plurality of printer drivers (pg. 7 lines 14-15) for installation based on a printer driver identifier (pg. 9, lines 10-19) and according to the following, if a particular printer driver of the plurality of printer drivers has a corresponding printer driver identifier that is the same as the received printer driver identifier, then selecting that particular driver for installation in order to enable the local printer to print (step 432), if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then selecting that particular printer driver for installation in order to enable the local printer to print (step 434), and if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver

identifier (step 436), then selecting that particular printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier for installation on the server computer in order to enable the local printer to print (step 428).

Claim 35 recites a computer readable medium having computer executable instructions, which when executed by a processor (56), causes the processor (56) to: receive at a server (52) a driver identifier (pg. 11, lines 4-15) for a printer (88) that is attached to a client (54) connected with the server (52), wherein the server (52) can print information at the client (54); use the driver identifier (pg. 11, lines 4-15) to select a closest matching driver (70) of a plurality of drivers (pg. 7 lines 14-15) to install at the server (52), and not at the client (54); and install, at the server (54), the selected driver (70) in order to enable applications that are executing to print to the printer (88) using the installed driver (70).

(6)   Grounds of Rejection to be Reviewed on Appeal

In the Final Office Action of 12/14/05 claims were 1, 15, 26, 33, and 35 stand rejected under 35 U.S.C. §112 1st paragraph and 35 U.S.C. §112 2nd paragraph. The §112 2nd paragraph rejection was subsequently withdrawn in the 3/25/05 Advisory Action. The Advisory Action maintained the §112 1st paragraph rejection.

The Final Office Action of 12/14/05 rejected claims 1, 2, 14-17, 26-28 and 33-35 under 35 U.S.C. § 102(e) as being anticipated. Claims 3-13, 18-25, 29-32

and 36-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable. The §102 and §103 rejections were maintained in the Advisory Action of 3/25/05.

(7)   Argument

§112 REJECTIONS

Claims 1, 15, 26, 33, and 35 stand rejected under 35 U.S.C. §112 1st paragraph.

Claims 1, 15, 26, 33, and 35

Appellant respectfully submits that the Examiner fails to establish a *prima facie* case for a §112 enablement rejection in the Final Office Action and the Advisory Action. First, the Office has failed the initial burden to establish a reasonable basis to question the enablement provided by the claimed invention. Second, the Office has failed to establish a *prima facie* case by mischaracterizing the Present Application with limitations which are neither taken from the Present Application nor supported in the record. Third, the Office has failed to expressly specify definitions of the claim terms which the Office is relying upon as a basis for the rejection. Fourth, the enablement rejection is erroneous in light of the originally filed specification. For the reader's convenience, the subject matter of Claim 1 is provided below as representative of a claim containing the rejected language, after which Appellant submits its arguments for Claims 1, 15, 26, 33, and 35.

Claim 1 recites a method in a server-client environment, the method comprising:

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- receiving at the server a driver identifier for a printer that is attached to the client;
- using the driver identifier to select a closest matching driver of a plurality of drivers to install at the server; and
- installing, at the server and not at the client, the selected driver in order to enable applications executing on the server to print to the printer using the installed driver.

The standard for determining whether the specification meets the enablement requirement of §112 1st paragraph is "undue experimentation" which is based on a multitude of factors. "In order to make (an enablement) rejection, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention." MPEP 2164.04. Appellant contends that the Office has not met this initial burden as a basis for the rejection, and instead the Office relies on a single unsupported conclusion that "installing...not at the client" is not enabled in the Specification." Final Office Action Pg. 3. In the Final Office Action the Office did not provide any basis whatsoever to support its enablement rejection. The entirety of the Office's enablement rejection is reproduced below.

2. Claims 1, 15, 26,33, and 35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the "installing....not at the client" is not enabled in the Specification, thus it was ignored.

The Final Office Action fails to provide any reasonable basis whatsoever in support of the enablement rejection. The advisory Action added little in this regard. A relevant portion of the Office's Advisory Action response to a "REQUEST FOR RECONSIDERATION" is reproduced below.

> The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
> An astute observation was made whether a client needs a driver. Arguably, the client does not need a driver, but the client
> needs a driver to push data to the printer or server in this case (review definitions of drivers). This raises the conundrum with
> regard to these claims that I was trying to describe. A careful study was made of the roles of the client and server in these
> claims and they are reversed as presently claimed, thus the 112. 2nd paragraph is withdrawn. However. the representative
> admitted the "Specification does not describe a print driver on the client" validates the 112, 1st paragraph.

The Office appears to be basing its enablement rejection at least in part on the definitions of 'driver' and server/client. MPEP 2164.04 expressly states that "it is **necessary** that the examiner select the definition that he/she intends to use when examining the application, based on his/her understanding of what Appellant intends it to mean, and **explicitly set for the meaning of the term and the scope of the claim when writing an office action**." The Office has failed to establish any basis in the record for these terms. Instead, the Office states "(review definitions of drivers)". The Office's rejection directly contravenes MPEP §2164.04 and as such the Office fails for this point alone to establish a *prima facie*

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case for a §112 enablement rejection. (The definition of a printer driver from the specification is reproduced at a subsequent point below.)

Further, the Office states that the "roles of the client and server...are reversed". Yet the Office provides no context for its assertion, e.g. are the roles reversed compared to the specification, or a reference? At least for this reason, the Office fails to establish a *prima facie* case for a §112 enablement rejection. Further, Appellant submits that for each of the above reasons the record does not contain a reasonable basis for the enablement rejection to which Appellant can respond.

Further still, the Office makes a conclusory statement that "the client needs a driver to push data to the printer or server in this case." The Office does not provide any basis for the underlying support for this statement. Once again, the Office acts in direct contravention to MPEP §2164.04 and as such the Office fails to establish a prima facie case for a §112 enablement rejection. However, the Office goes a step further and relies upon its unsupported statement to maintain the enablement rejection. The Office states "the representative admitted the "Specification does not describe a print driver on the client" validates the 112, 1st paragraph". Yet the entire supposition is based upon the conclusion that the client needs a driver which is totally unsupported in the record. For any of the above plurality of reasons, Appellant respectfully requests that the §112 enablement rejection be overturned.

Appellant respectfully contends that the Office's §112 enablement rejection is erroneous in light of Appellant's originally filed specification excerpts of which are provided below. The Specification beginning on page 6 and in relation to Fig.

2 describes a server/client system 50 having a server 52 and a client 54. (Specification, Pg. 6, lines 10-12). (The designator 32 is utilized for the server in relation to Fig. 1 and designator 52 is utilized in relation to Fig. 2, the client is handled in a similar manner). The specification further describes:

> The server 32 is a computer. A client 34, 36 may be a computer having Plug and Play capability, a computer that is not Plug and Play compatible, or a terminal, which does not have the processing capability of a computer. (Pg. 5 lines 13-16).

> The server 32 is configured to provide a logically independent machine for each client 34, 36 connected to the network 38. That is, the server 32 establishes a session for each client 34, 36, provides the desktop 40, 42 for each client 34, 36, and makes server resources available to the clients 34, 36. Such resources include, but are not limited to, allocations of processor time, memory, data storage, video processing, application programs, etc. A user of either of the clients 34, 36 interacts with the desktop 40, 42 on the client 34, 36 to run software applications that reside on the server 32. While the user provides input to and receives output from the client 34, 36, most processing is performed at the server 32. (Page 5 line 22 – Page 6 line 5).

> The server 52 is shown having a printer driver 70 and a printer queue 72 installed and resident within the memory 58. (Pg. 7 lines 5-6). The printer driver 70 is a printer-specific software program that provides an interface between a printer and the server 52 and allows the server 52 to provide print functions via the printer. (Pg. 7 lines 8-11).

In essence, consistent with at least some of the implementations described in the specification, there is little or no data on the client to "push" to the server as asserted by the Office in the Advisory Action. In contrast, the data resides at the server with the client receiving only a representation.

Further, the Office contends that "a negative type limitation, that implicitly teaches other related parts remaining, to avoid obvious elements of a reference does not excude novelty of the whole". (Advisory Action). Appellant respectfully

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suggests that the Office's contention is misplaced in this instance. As mentioned above, at least some of the presently described implementations can operate with a client, such as a terminal, having reduced processing capabilities than configurations requiring a driver on the client, among other advantages.

For at least the above mentioned reasons, Appellant respectfully requests that the enablement rejection of claims 1, 15, 26, 33, and 35 be overturned.

§102 REJECTIONS

Claims 1, 2, 14-17, 26-28, and 33-35

Claims 1, 2 and 14

Appellant respectfully submits that Claims 1 is not anticipated by the art of record. To anticipate a claim, the reference must teach every element of the claim. The Office expressly states that Poger does not teach all the claim elements. For the reader's convenience, the subject matter of the Claim 1 is provided below, after which Appellant submits its arguments for Claim 1.

Claim 1 recites a method in a server-client environment, the method comprising:

- receiving at the server a driver identifier for a printer that is attached to the client;
- using the driver identifier to select a closest matching driver of a plurality of drivers to install at the server; and
- installing, at the server and not at the client, the selected driver in order to enable applications executing on the server to print to the printer using the installed driver.

To anticipate a claim, the reference must teach every element of the claim. (See MPEP §2131). On page 5, lines 9-11 of point 4 of the Final Office Action,

the Office states "Poger teaches the invention in the above claim(s) **except for explicitly teaching installing a closest matching type driver system**, such as by name and version, **on the server side for printing at the client printer**". Claim 1 recites "installing, at the server and not at the client, the selected [closest matching] driver in order to enable applications executing on the server to print to the printer using the installed driver". Appellant respectfully submits that Poger does not anticipate Claim 1 in light of the Office's own statement.

Poger does not anticipate Claim 1 at least for the following additional reasons. Claim 1 is directed to a server-client environment where applications executing on the server can print to the printer that is attached to the client. Poger describes a distributed network which includes a configuration server connected to a network device via a network. (Col. 3, Lines 44-46). The configuration server correlates a type of the network device with the appropriate driver software for communicating with the device.

Poger is totally silent as to any applications executing on its communication server. More specifically, Poger does not describe enabling applications executing on the server to print to a printer attached to a client as recited in Claim 1. Appellant respectfully submits that Poger does not teach every element of the claim 1. Therefore, for at least these additional reasons, Appellant respectfully requests that the §102 rejection based upon Poger be overturned.

Appellant has made a good faith effort to address the §102 rejection of claim 1 despite the fact that the Office has not considered the claim amendments relating to "installing, at the server and not at the client" such as is recited in claim 1 in the Final Office Action. The Office subsequently stated in the Advisory

Action that the claim amendments were considered. However, no specificity was provided in the record. The Office also stated in the Advisory Action that the claim amendments such "as installing, at the server <u>and not at the client</u>" are "a negative type limitation, that implicitly teaches other related parts remaining, to avoid obvious elements of a reference does not exude novelty of the whole." Appellant respectfully disagrees. Appellant respectfully submits that the recited claim amendments neither imply other parts remaining nor are to avoid obvious elements of a reference. For instance, in the server-client environment recited in Claim 1 applications are executing on the server. Such a configuration can lessen the requirements for a device which can function as a client. Similarly, by installing the driver on the server where the applications are executing and not on the client, the requirements of a device functioning as the client may be lessened. For at least these additional reasons, Appellant respectfully requests that the §102 rejection of Claim 1 be overturned.

Claims 2 and 14 depend from Claim 1 and Appellant requests that the §102 rejection of claims 2 and 14 be overturned at least for the reasons described above in relation to Claim 1.

Claims 15-17

Appellant respectfully submits that **Claim 15** is not anticipated by the art of record. To anticipate a claim, the reference must teach every element of the claim. The Office expressly states that Poger does not teach all the claim elements. For the reader's convenience, the subject matter of the Claim 15 is provided below, after which Appellant submits its arguments for Claim 15.

Claim 15 is directed to a method implemented in a server in a server-client environment. The method recites:

- automatically selecting at least one of a plurality of drivers corresponding to a peripheral device attached to the client; and
- installing, at the server and not at the client, the selected at least one driver wherein the server can interface with the peripheral device using the driver to cause the selected at least one driver to perform an action at the peripheral device using the driver.

To anticipate a claim, the reference must teach every element of the claim. (See MPEP §2131). On page 5, lines 9-11 of point 4 of the Final Office Action, the Office states "Poger teaches the invention in the above claim(s) **except for explicitly teaching installing a closest matching type driver system**, such as by name and version, **on the server side for printing at the client printer**". Claim 15 recites "installing, at the server and not at the client, the selected at least one driver wherein the server can interface with the peripheral device using the driver to cause the selected at least one driver to perform an action at the peripheral device using the driver". Appellant respectfully submits that Poger does not anticipate Claim 15 in light of the Office's own statement.

Claims 16-17 depend from Claim 15 and Appellant requests that the §102 rejection of claims 16-17 be overturned at least for the reasons described above in relation to Claim 15.

<u>Claims 26-28</u>

Appellant respectfully submits that **Claim 26** is not anticipated by the art of record. To anticipate a claim, the reference must teach every element of the claim. Poger does not describe all of the claim elements of Claim 26. For the reader's

convenience, the subject matter of the Claim 26 is provided below, after which Appellant submits its arguments for Claim 26.

Claim 26 is directed to computer-readable media having stored thereon a computer program that, when executed by one or more processors of a server in a client-server system, causes the one or more processors to:

- receive a printer driver identifier for a printer attached to a client;
- use the printer driver identifier to select one of a plurality of printer drivers to install at the server and not at the client according to the following,
    - o if a particular printer driver of the plurality of printer drivers has a corresponding printer driver identifier that is the same as the received printer driver identifier, then selecting that particular driver,
    - o if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then selecting that particular printer driver, and
    - o if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver identifier, then selecting that particular printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier; and
    - o install the selected printer driver at the server in order to enable the selected printer to print.

To anticipate a claim, the reference must teach every element of the claim. (See MPEP §2131). Poger is totally silent as to "if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then

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selecting that particular printer driver" and "if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver identifier, then selecting that particular printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier" as recited in Claim 26. Appellant respectfully submits that Poger does not teach every element of the claim 26. Therefore, Appellant respectfully requests that the §102 rejection based upon Poger be overturned.

Claims 27 and 28 depend from Claim 26 and Appellant requests that the §102 rejection of claims 27 and 28 be overturned at least for the reasons described above in relation to Claim 26.

Claims 33-35

Appellant respectfully submits that Claims 33-35 are not anticipated by the art of record. To anticipate a claim, the reference must teach every element of the claim. Poger does not describe all of the claim elements of Claims 33-35.

Claims 33-35 recite limitations similar to those described above in relation to Claim 26. Appellant respectfully requests that the §102 rejection based upon Poger be overturned at least for the reasons described above in relation to Claim 26.

§103 REJECTIONS

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Claims 3-13, 18-25, 29-32, and 36-40

Claims 3-13, 18-25, 29-32, and 36-40

Appellant respectfully submits that the Examiner fails to establish a *prima facie* case of obviousness for rejecting Claims 3-13, 18-25, 29-32, and 36-40 in the Final Office Action for at least two reasons. The Office fails to establish a *prima facie* case since the proposed combination fails to teach all of the claim elements of Claims 3-13, 18-25, 29-32, and 36-40. Second, the Office fails to identify any motivation from the references for the Office's suggested combination.

Claims 3-13, 18-25, 29-32, and 36-40 stand rejected under §103 based on Poger in view of Kathail. In the Final Office Action, the Office states "Poger teaches the invention in the above claim(s) **except for explicitly teaching installing a closest matching type driver system**, such as by name and version, **on the server side for printing at the client printer**". Final Office Action, page 5, lines 9-11 of point 4. The Office then brings in Kathail to supply this missing claim limitation.   However, in the 1/13/04 Office Action, the Office stated "Kathail teaches the invention in the above claim(s) **except for explicitly teaching installing a print driver on the server side for printing at the client printer**". (1/13/04 Office Action, Page 3, Lines 10-11 of Point #4). The Office has expressly stated that Kathail does not describe the very element which the Office subsequently looks to Kathail to provide. At least as it relates to the above statements, Appellant respectfully submits that Kathail does not provide the deficiencies noted above in relation to the rejection of the base claims from which claims 3-13, 18-25, 29-32, and 36-40 depend.   For instance, Claim 1 recites

"installing, at the server and not at the client, the selected driver in order to enable applications executing on the server to print to the printer using the installed driver" which is not taught of suggested by either Poger or Kathail singly or in the proposed combination. For at least this reason, Appellant respectfully requests that the §103 rejection of claims 3-13, 18-25, 29-32, and 36-40 be overturned.

Further, the Office provides an insufficient basis for combining Poger and Kathail. The Office's states "[I]n that Poger operates to generate compatible drivers, the artisan would have looked to the software upgrade arts for details of implementing software compatability." The Office contends that "[t]he motivation to incorporate matching of drivers [sic] types insures that distributed processing in an open platform is supported especially in thin-clients." Appellant respectfully disagrees that Poger generates any drivers, but more importantly Appellant respectfully notes that neither reference contains the terms "distributed processing", "open platform" or "thin-client". In contravention to MPEP 2143.01 the record is devoid of evidence for motivation to combine the references as suggested by the Office at the time of the present invention. Appellant respectfully requests that lacking a more definitive record, the Office has failed to establish a prima facie case for a §103 rejection in accordance with MPEP § 2143. Appellant respectfully requests that the §103 rejection be overturned for at least this additional reason.
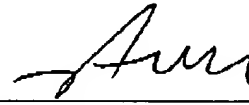
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Conclusion

Appellant respectfully submits that all of the Examiner's rejections have been traversed. As such, Appellant respectfully submits that all of the claims are in condition for allowance.

Respectfully Submitted,

Dated: 8/15/05

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(8)   Appendix of Appealed Claims

1.   (Previously Presented) A method in a server-client environment, the method comprising:

receiving at the server a driver identifier for a printer that is attached to the client;

using the driver identifier to select a closest matching driver of a plurality of drivers to install at the server; and

installing, at the server and not at the client, the selected driver in order to enable applications executing on the server to print to the printer using the installed driver.

2.   (Previously Presented) A method as recited in claim 1, wherein the receiving comprises receiving the driver identifier from the client.

3.   (Original) A method as recited in claim 1, wherein the driver identifier includes both a driver name and a driver version.

4.   (Original) A method as recited in claim 1, wherein the using comprises accessing a library at the server that stores the plurality of drivers.

5.   (Original) A method as recited in claim 1, wherein:

the using comprises checking whether any of the plurality of drivers has a corresponding driver identifier that is the same as the received driver identifier; and

if a particular driver of the plurality of drivers has a corresponding driver identifier that is the same as the received driver identifier, then selecting that driver to install at the server.

6.   (Original) A method as recited in claim 1, wherein:

the using comprises checking whether any of the plurality of drivers currently has a corresponding driver identifier that is different than the received driver identifier but that corresponds to the same driver as the received driver identifier; and

if a particular driver of the plurality of drivers currently has a corresponding driver identifier that is different than the received driver identifier but that corresponds to the same driver as the received driver identifier, then selecting that driver to install at the server.

7. (Original) A method as recited in claim 6, wherein one of the plurality of drivers currently has a corresponding driver identifier that is different than the received driver identifier but that corresponds to the same driver because of a driver name change by a source of the driver.

8. (Original) A method as recited in claim 6, further comprising:

issuing a notification that the selected driver currently has a corresponding driver identifier that is different than the received driver identifier but that corresponds to the same driver as the received driver identifier.

9. (Original) A method as recited in claim 1, wherein:

the receiving comprises receiving a driver name and a driver version;

the using comprises checking whether any of the plurality of drivers has a corresponding driver name that is the same as the received driver name; and

if a particular driver of the plurality of drivers has a corresponding driver name that is the same as the received driver name, then selecting that driver to install at the server.

10. (Original) A method as recited in claim 9, further comprising:

selecting a first driver with a corresponding driver name that is the same as the received driver name to install at the server without regard for whether the

received driver version is the same as a corresponding driver version of the first driver.

11.   (Original) A method as recited in claim 9, further comprising:

issuing a notification that the selected driver has a corresponding driver name that is the same as the received driver name but a corresponding driver version that is different than the received driver version.

12.   (Original) A method as recited in claim 9, further comprising:

checking whether the selected driver has a corresponding driver version that is the same as the received driver version; and

if the selected driver does not have a corresponding driver version that is the same as the received driver version, then obtaining a new copy of the driver that has the same driver version as the received driver version.

13.   (Original) A method as recited in claim 12, further comprising obtaining a new copy of the driver only if the received driver version indicates a more recent version of the driver than is indicated by the driver version corresponding to the selected driver.

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14.   (Original) At least one computer-readable memory containing a computer program that is executable by a processor to perform the method recited in claim 1.

15.   (Previously Presented) A method implemented in a server in a server-client environment, the method comprising:

automatically selecting at least one of a plurality of drivers corresponding to a peripheral device attached to the client; and

installing, at the server and not at the client, the selected at least one driver wherein the server can interface with the peripheral device using the driver to cause the selected at least one driver to perform an action at the peripheral device using the driver.

16.   (Original) A method as recited in claim 15, wherein the peripheral device comprises a printer.

17.   (Original) A method as recited in claim 15, wherein the automatically selecting comprises using a received driver identifier corresponding to a printer to select a closest matching driver of the plurality of drivers to install at the server.

18. (Original) A method as recited in claim 15, wherein:

the automatically selecting comprises checking whether any of the plurality

of drivers has a corresponding driver identifier that is the same as a received driver

identifier; and

if a particular driver of the plurality of drivers has a corresponding driver

identifier that is the same as the received driver identifier, then installing that

driver at the server.

19. (Original) A method as recited in claim 15, wherein:

the automatically selecting comprises checking whether any of the plurality

of drivers currently has a corresponding driver identifier that is different than a

received driver identifier but that corresponds to the same driver as the received

driver identifier; and

if a particular driver of the plurality of drivers currently has a corresponding

driver identifier that is different than the received driver identifier but that

corresponds to the same driver as the received driver identifier, then installing that

driver at the server.

20. (Original) A method as recited in claim 19, further comprising:

issuing a notification that the installed driver currently has a corresponding

driver identifier that is different than the received driver identifier but that

corresponds to the same driver as the received driver identifier.

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21.   (Original) A method as recited in claim 15, wherein:

the automatically selecting comprises checking whether any of the plurality

of drivers has a corresponding driver name that is the same as a received driver

name; and

if a particular driver of the plurality of drivers has a corresponding driver

name that is the same as the received driver name, then installing that driver at the

server.

22.   (Original) A method as recited in claim 21, further comprising:

selecting a first driver with a corresponding driver name that is the same as

the received driver name to install at the server without regard for whether a

received driver version is the same as a corresponding driver version of the first

driver.

23.   (Original) A method as recited in claim 21, further comprising:

issuing a notification that the installed driver has a corresponding driver

name that is the same as the received driver name but a corresponding driver

version that is different than the received driver version.

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24. (Original) A method as recited in claim 21, further comprising:

checking whether the installed driver has a corresponding driver version that is the same as a received driver version; and

if the selected driver does not have a corresponding driver version that is the same as the received driver version, then obtaining a new copy of the driver that has the same driver version as the received driver version.

25. (Previously Presented) The method of claim 15, wherein at least one computer-readable memory contains a computer program that is executable by a processor to perform the method.

26. (Previously Presented) One or more computer-readable media having stored thereon a computer program that, when executed by one or more processors of a server in a client-server system, causes the one or more processors to:

receive a printer driver identifier for a printer attached to a client;

use the printer driver identifier to select one of a plurality of printer drivers to install at the server and not at the client according to the following,

if a particular printer driver of the plurality of printer drivers has a corresponding printer driver identifier that is the same as the received printer driver identifier, then selecting that particular driver,

if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then selecting that particular printer driver, and

if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver identifier, then selecting that particular printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier; and

install the selected printer driver at the server in order to enable the selected printer to print.

27. (Original) A method as recited in claim 26, wherein the server comprises a terminal server and wherein the client comprises a terminal server client.

28. (Original) A method as recited in claim 26, wherein one of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver due to a name of the printer driver being changed.

29. (Previously Presented) An apparatus comprising:

a driver library including a plurality of printer drivers; and

a driver matching module to select at least one of the plurality of printer drivers to be installed on the apparatus to enable a printer attached to a client connected with the apparatus to print, wherein the driver is installed on the apparatus and not the client.

30. (Previously Presented) An apparatus as recited in claim 29, wherein the driver matching module further:

checks whether any of the plurality of drivers has a corresponding driver identifier that is the same as a received driver identifier; and

wherein if a particular driver of the plurality of drivers has a corresponding driver identifier that is the same as the received driver identifier, then install that driver at the server.

31. (Previously Presented) An apparatus as recited in claim 29, further comprising:

a mapping table to map previous driver identifiers to subsequent driver identifiers;

wherein the driver matching module further checks the mapping table to determine whether any of the plurality of drivers currently has a corresponding driver identifier that is different than a received driver identifier but that corresponds to a same printer driver as the received printer driver identifier; and

if so, then installs the corresponding printer driver at the server.

32. (Previously Presented) An apparatus as recited in claim 29, wherein the driver matching module further:

checks whether any of the plurality of printer drivers has a corresponding driver name that is the same as a received driver name; and

wherein if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as the received driver name, then install that printer driver at the server without regard for whether that particular printer driver has a corresponding driver version that is the same as a received driver version.

33. (Previously Presented) A system comprising:

a client computer having a local printer attached thereto; and

a server computer coupled to the client computer via a network, wherein the server computer includes,

a driver library including a plurality of printer drivers, and

a driver matching module to select at least one of the plurality of printer drivers for installation on the server computer and not the client computer to allow applications executing on the server computer to print to the local printer, the driver matching module selecting one of the plurality of printer drivers for installation based on a printer driver identifier and according to the following,

if a particular printer driver of the plurality of printer drivers has a corresponding printer driver identifier that is the same as the received printer driver identifier, then selecting that particular driver for installation in order to enable the local printer to print,

if a particular printer driver of the plurality of printer drivers currently has a corresponding printer driver identifier that is different than the received printer driver identifier but that corresponds to the same printer driver as the received printer driver identifier, then selecting that particular printer driver for installation in order to enable the local printer to print, and

if a particular printer driver of the plurality of printer drivers has a corresponding driver name that is the same as a driver name received as part of the printer driver identifier, then selecting that particular

printer driver without regard for whether that particular printer driver has a corresponding driver version that is the same as a driver version received as part of the printer driver identifier for installation on the server computer in order to enable the local printer to print.

34.   (Previously Presented) A system as recited in claim 33, wherein the client computer transmits the printer driver identifier to the server computer.

35.   (Previously Presented)   A computer readable medium having computer executable instructions, which when executed by a processor, causes the processor to:

receive at a server a driver identifier for a printer that is attached to a client connected with the server, wherein the server can print information at the client;

use the driver identifier to select a closest matching driver of a plurality of drivers to install at the server, and not at the client; and

install, at the server, the selected driver in order to enable applications that are executing to print to the printer using the installed driver.

36.   (Previously Presented)   The computer-readable media of claim 35, wherein said applications run on the server.

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37. (Previously Presented) The computer-readable media of claim 35, wherein the driver identifier includes both a driver name and a driver version.

38. (Previously Presented) The computer-readable media of claim 35, wherein the driver identifier is used to access a library at the server that stores the plurality of drivers.

39. (Previously Presented) The computer-readable media of claim 35, wherein:

the driver identifier is used to check whether any of the plurality of drivers has a corresponding driver identifier that is the same as the received driver identifier; and

if a particular driver of the plurality of drivers has a corresponding driver identifier that is the same as the received driver identifier, then select that driver to install at the server.

40. (Previously Presented) The computer-readable media of claim 35, wherein:

the driver identifier is used to check whether any of the plurality of drivers currently has a corresponding driver identifier that is different than the received driver identifier but that corresponds to the same driver as the received driver identifier; and

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if a particular driver of the plurality of drivers currently has a corresponding

driver identifier that is different than the received driver identifier but that

corresponds to the same driver as the received driver identifier, then select that

driver to install at the server.

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